



SCU™ Specialty trace Metals Removal Media

For removal of transition metals from industrial wastewater, groundwater, and stormwater runoff

Description

SCU™ specialty media is a proprietary adsorbent which is similar in appearance to granular activated carbon or anthracite but with a higher density and particle hardness. It removes trace levels of various heavy metals from complex waters to levels not possible with standard ion exchange resins.

Ion exchange has historically been a proven technology to achieve metals discharge standards but in most cases has difficulty in achieving effluent levels below 25 ppb, depending on the contaminant and chemistry of the water. With many industries facing new, stricter metals discharge levels, Evoqua Water Technologies has developed SCU specialty media. This new class of adsorbent can routinely achieve effluent levels below 1 ppb for most metals and can achieve levels below 12 ppt (the current US regulation standard for discharge into the environment) for mercury.

applications

SCU specialty media has been successfully used in a number of applications:

- Industrial Wastewater
- Groundwater Remediation
- Stormwater Runoff

Metals removed by SCU specialty media include the following:

- | | |
|----------------------|-----------|
| • Cadmium | • Mercury |
| • Trivalent Chromium | • Nickel |
| • Copper | • Zinc |
| • Lead | |

Service and Disposal Options

To apply SCU specialty media, Evoqua offers integrated treatment alternatives which include the option of permanent or temporary exchange vessels/systems. Our service exchange approach integrates equipment and service combinations, thereby minimizing the customer's capital investment and reducing overall space requirements. Service exchange provides the ultimate flexibility to add or remove treatment capacity as your business grows or compliance limits change. This option also saves valuable manufacturing space while minimizing your maintenance and installation requirements.

Once exhausted, spent SCU specialty media can be transferred to Evoqua RCRA licensed central treatment and processing facility where both non-hazardous and hazardous wastes are treated in compliance with all state and federal guidelines and valuable metals are recycled into raw materials when possible.

Fea tureS and BeneFi tS:

- Trace metals removal possible to ppb / ppt levels
- Applications fully supported by Evoqua laboratory facilities to evaluate and tailor specific solutions to each metals removal application
- Standard SCU™ specialty media system designs for flows from 1 to 5,000 gpm and higher
- SCU specialty media technology is simple to install and operate
- Service based offerings reduce capital investment required
- Full service capabilities for spent media exchange and disposal available

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Form (as shipped)	Irregularly shaped, granular
Typical metals capacity (lb./ft. ³)	1.5 - 2.5 lb. / cu. ft.

PHYSiCa l PROPer tieS

Particle size	10 X 30 mesh / 600 X 2000 mm
Bulk density (lb./ft. ³)	39 – 45

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Operating pH range	5 to 11
Typical service flow rate (gpm/ft. ³)	1.0-2.2
Maximum operating temperature	120 ° F



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